

GEOL 101-01-071 Physical Geology Spring 2007 TR 1100-1215 HANN 337

Professor: Dr. Anthony Feig (The name "Feig" rhymes with "beg," "leg," "peg" and "vague.")

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Office hours: M: 10-2; T: 9-11 & 4-5; W: 11-2; R: 9-11

email: Use the Blackboard message system by logging into <http://blackboard.ulm.edu>

Course Description: The external and internal features of the earth and the agents responsible for them, including the work of rivers, winds, glaciers volcanoes earthquakes and oceans. Credit may not be earned in both GEOL 101 and GEOL 206. Prerequisites: none.

Course Objectives: Upon successful completion of this course, students will be able to:

- 1) identify minerals and igneous rocks;
- 2) describe the processes that form igneous rocks, including volcanism and plutonism;
- 3) describe earthquake processes;
- 4) describe the processes of plate tectonics and explain rock and landform occurrences using plate tectonics;
- 5) identify sedimentary rocks and fossils;
- 6) describe the processes that form sedimentary rocks;
- 7) describe the processes of weathering;
- 8) explain ocean and coastal processes;
- 9) describe the mechanisms of wind, rivers and glaciers;
- 10) describe basic earth-sun relationships and the compositions of other planets in the solar system.

Evaluation & Assessment: This course is theme-based on the real-world problem of long-term nuclear waste storage at the Yucca Mountain Project (YMP) in southern Nevada. This is a real-world geological problem that affects us here in Louisiana and persons all over the U.S. Through a "site characterization" of the YMP, we can meet each Course Objective and the Course Description as stated above is a comprehensive Assessment activities include: Four long-essay Site Characterizations, submitted via Blackboard. (400 pts), twelve In-Class Activities, ten of which will be counted—this means two are dropped (100 pts), four Electronic Activities (100 pts), and an Electronic Module, which includes Six Quizzes (120 pts) and one Exam (100 pts); total for the Electronic Module = 220 points:

Your final grade is based on a total points possible of 820.

90-100%	738-820 points	A
80-89%	656-737 points	B
70-79%	574-655 points	C
60-69%	492-573 points	D
less than 60%	0-493 points	F

Course Policies: Please note these course policies that I use in this class:

- A. All cellular telephones **are to be turned off during class**. Conducting telephone conversations during class time may result in disciplinary action.
- B. Text & Software: Not required but highly recommended; any college-level Historical Geology or Earth Science text no older than 5 years. Buy one on-line or at a used bookstore for maximum savings. Required Software: Microsoft PowerPoint and Word, either Office XP or Office 2003. WordPerfect and MS Works documents are NOT acceptable! I recommend using Mozilla to browse Blackboard, because it is more stable than Explorer.
- C. Attendance. The key to success in this class is attendance. This is the only way that I can keep track of you and your understanding of the material. If you miss more than 10% of total class sessions due to an unexcused absence, I may recommend to your Academic Dean that you lose the right to attend class and continue coursework, as outlined in the Student Policy Manual (<http://www.ulm.edu/studentpolicy/>). In order for an absence to be excused, you must make prior arrangements with me, or bring documentation of your absence afterward. Acceptable documentation is outlined in the Student Policy Manual.

- D. Submit all Discussions and Postings via the Discussion Boards. Submit all other typed assignments via the Digital Dropbox, or attached to a Message.
- E. DO NOT send me assignments or correspondence via ULM Email. ALWAYS use Blackboard's Message system or the Digital Dropbox. Messages or submissions sent via ulm.edu will not be read or graded.
- F. All assignments with specific due dates are due at the date and time specified. You are given a minimum of seven days to complete them via Blackboard. Therefore, NO makeups are issued for these assignments. Unless otherwise specified, all due TIMES are 4 PM on the due date.
- G. As Electronic Activities are assigned, you will be notified in writing via a Blackboard Announcement of their due dates. You typically have 7 days to complete an Activity. Late submissions will NOT be accepted.
- H. In-class Activities may NOT be made up. If you miss up to two due to an excused absence, they will count as the two Activities dropped. Situations of three or more excused absences resulting in three or more missed In-Class Activities will be evaluated on a case-by-case basis, in consultation with either the ULM entity issuing the excuse, or the GEOS Department Head.
- I. Technical problems with Blackboard, the ULM system OR your home computer will NOT EVER extend due dates or due times. In fact there are only two exceptions: 1) system-wide maintenance dictated by the Helpdesk; 2) system-wide issues that the Helpdesk advises ME of directly. Without Helpdesk documentation sent directly to me, technical problems do NOT extend due dates.
- J. Assignments will disappear from the list when the due date and time lapses.
- K. I will lock down the course and begin tallying grades on 11 MAY, 13 JAN at 4:00 P.M. Anything not submitted by then will get a ZERO, and NO submissions past this time are accepted.
- L. Midterm grades will be posted on-line for students to view via Arrow. Midterm grades indicate a student's status at mid-semester only and do not indicate the final performance outcome of a student.
- M. Course Evaluation: Please complete the Online Course Evaluation via Arrow during Finals Week.
- N. The final day to drop with a grade of W is 23 MAR.
- O. Emergency Procedures: In the event that it becomes necessary to evacuate Hanna Hall, please use the nearest exit and assemble in the quad area. Please do not re-enter the building until safety officials announce that it is safe to do so.
- P. The Family Educational Rights & Privacy Act: Student rights concerning access to educational records are spelled out in Federal Public Law 98-380 as amended by Public Law 93-568 and in regulations published by the Department of Education. Student records and class schedules will be released only to students showing proper identification.
- Q. Student Services: If you think you may have a disability or if you are experiencing learning difficulties, please contact the [Counseling Center](#) at 318.342.5220 (voice or TTY), in Student Health and Counseling Building, or by E-Mail at counseling.center@ulm.edu. They will assist with any necessary accommodations. You should also meet with me in order to facilitate your needs. You MUST provide documentation of your disability in order to make special arrangements in this class.
- R. Academic Integrity: The Geosciences Department has gone to great lengths in order to make learning the material easier than engaging in scholastic dishonesty, which is defined in the ULM Student Policy Handbook and also at <http://www.ulm.edu/studentpolicy/>. Be aware of the problem of COLLUSION. An example of collusion would be working with your friend and turning in identical material. This is considered to be academic dishonesty. In this course, you need to think, type, and submit original material. Group work can be OK, but your assignment should never resemble another person's work.

Your continued enrollment in this course implies that you have read and understand this syllabus, and that you agree to abide by the conditions herein.

Parts of this course are self-paced. Please understand this: the term "self-paced" contains the word PACED, which you should take to mean PACE YOUR WORK! The term "self-paced" does NOT mean, "do everything in the last 2 weeks of the course." Do a little bit every week. If you wait until the very last minute to do the assignments, you run substantial risk, because Blackboard may crash if too many people try to do too much work on it all at once.

Course Schedule and Topics List

As a group, we will identify the geological concepts necessary to understand nuclear waste storage site characterization. Therefore, the order and timing of topics “covered” will be dictated largely by YOU, under my advisement. Some items have fixed dates. They are as follows:

16-18 JAN: Introduction to the Problem of Long-Term Nuclear Waste Storage

23 JAN: Volcanism at YMP, Presented by Dr. Karen Blair, a candidate for a Faculty position at ULM

25 JAN: Basic Geology, Presented by Dr. Amelia Robinson, another Faculty candidate

6 FEB: Site Characterization 1 DUE, 4PM

6 MAR: Site Characterization 2 DUE, 4PM

3 APR: Site Characterization 3 DUE, 4PM

7 MAY (Monday): Site Characterization 4 DUE, 3-4:50 PM (Final Exam Period)

The List of Topics will Include but not be limited to:

Plate Tectonics

Volcanism

The Rock Cycle

Igneous Processes & Rocks

Metamorphism

Sedimentology & Sedimentary Rocks

The Hydrologic Cycle

Earthquakes

Weathering

Coastal Processes & Oceanography

Streams & Groundwater